Bioterrorism Hospital Preparedness Program

Cooperative Agreement Guidance

Health Resources and Services Administration U.S. Department of Health and Human Services

February 15, 2002

I. Introduction

In the wake of the terrorist attacks of September 11, 2001, and the subsequent anthrax epidemic, attention was focused on the ability of hospitals and emergency medical services (EMS) systems to respond to bioterrorist events.

In one recent survey of rural and urban emergency departments in the middle Atlantic area, none of the rural respondents believed that their hospitals were prepared at all for biological weapons incidents, and most of the urban respondents felt only partially prepared. None of the rural sites, and only half of the urban sites, had decontamination stations that could accommodate 10-15 casualties at a time. Although 87% of the hospitals could handle 10-50 noncontaminated casualties at once, only 10% could manage 50-100 mass casualty patients. There was a universal need for training in handling casualties of weapons of mass destruction, but lack of time, available courses, computer access and funding emerged as barriers to this type of training. Although 10% conducted chemical disaster drills, only 3% conducted biological disaster drills. Only 4% of the respondents were prepared, or even knew about, the potential for secondary terrorist attacks on health care workers. However, recent events have shown that the potential for secondary attacks on EMS units and hospitals is real.

Outpatient care providers and EMS personnel also face the challenge of becoming trained and prepared to respond to biological mass casualties, whether they present in large numbers acutely or more insidiously over time. While generally well prepared to respond to routine emergencies and minor epidemics, they may lack the plans and infrastructure to respond to the new challenges posed by biological terrorist acts. A sudden influx of huge numbers of sick or contaminated patients from such an attack could completely overwhelm the medical system.

The recent outbreak of anthrax stemming from mailings of weaponized spores through the U.S. postal system is the first instance of bioterrorism in the United States in modern times. Although the Federal government has staged more than 200 counterterrorism training exercises since 1996, when the "Defense Against Weapons of Mass Destruction Act" was passed by Congress, concern has been expressed from many quarters about the continued lack of preparedness of hospitals, community clinicians and EMS systems to respond to biological attacks. In October 2001, the Washington Post² reported on the backup of employees seeking anthrax screening in the Capitol, which led to referral to local hospitals and physicians who then sent them

back to the Capitol medical authorities. Problems identified in both that and other instances included lack of physician experience with anthrax, lack of knowledge of laboratories that could test for anthrax, and lack of early guidance on prophylaxis recommendations. Although the Centers for Disease Control and Prevention (CDC) and other medical groups have produced a plethora of web-based and other resources on these subjects as the situation has evolved, it can be expected that ready knowledge of these issues will wane over time in the quiet interval between bioterrorist attacks.

Lest we become complacent as the anthrax epidemic wanes, it is important to realize that bioterrorist groups may have access to more biological weapons. For example, when United Nations inspectors were still allowed into Iraq, evidence was found that thousands of pounds of anthrax culture, hundreds of liters of *Clostridium botulinum* culture, and several kilograms of botulinum toxin were possessed by that government.³

In response to bioterrorism, Congress has authorized funding through the Public Health and Social Services Emergency Fund (Section 319 of the Public Health Service Act, 42 U.S.C.247d) to support activities related to countering potential biological threats to civilian populations. Funding was provided under the Department of Defense and Emergency Supplemental Appropriations for Recovery from and Response to Terrorist Attacks on the United States Act, 2002, Public Law 107-117.

As part of this initiative, the Health Resources and Services Administration (HRSA) announces that approximately \$125 million is available in fiscal year 2002 for cooperative agreements with 59 State, territorial and selected municipal offices of public health. These awards are for the development and implementation of regional plans to improve the capacity of hospitals, their emergency departments, outpatient centers, EMS systems and other collaborating health care entities for responding to incidents requiring mass immunization, treatment, isolation and quarantine in the aftermath of bioterrorism or other outbreaks of infectious disease.

II. Purpose

The purpose of this cooperative agreement program is to upgrade the preparedness of the Nation's hospitals and collaborating entities to respond to bioterrorism. This will also allow the health care system to become more prepared to deal with nonterrorist epidemics of rare diseases. The prime focus will be on identification and implementation of bioterrorism preparedness plans and protocols for hospitals and other participating health care entities. Development of statewide or regional models for such protocols is encouraged, as is collaboration with other States and expert national organizations.

The cooperative agreements will cover two phases:

Phase 1 (Needs Assessment, Planning and Initial Implementation): This will consist of State, territorial, regional and municipal efforts to involve entities such as hospital associations, emergency medical systems, emergency management agencies, rural health offices, primary care associations, and VA and military hospitals in a needs assessment of hospital preparedness to respond to a bioterrorist incident, and to develop a plan of action in response to the identified needs. No more than half of the phase 1 funds may be used for development of plans, with the remainder to be used for implementation of immediate needs such as recruitment and training of emergency medical personnel and upgrading of hospital infrastructures in such areas as infection control and mass casualty management.

Each Statewide plan is expected to integrate its proposal for the HRSA cooperative agreements for Bioterrorism Hospital Preparedness (contained in this guidance) with other FY 2002 funds being made available through two other mechanisms: (1) the CDC cooperative agreements for upgrading State and local public health preparedness for bioterrorism; and (2) funds directed to selected municipalities by the DHHS Office of Emergency Preparedness (OEP) for Metropolitan Medical Response Systems.

Phase 2 (Implementation): States will be given the flexibility to prioritize funding for specific activities based upon their needs assessment. This implementation phase should result in States being able to upgrade the ability of hospitals and other health care entities to respond to biological events, to develop a multitiered system in which local health care entities are prepared to triage, isolate, treat, stabilize and refer multiple casualties of a bioterrorist incident to identified centers of excellence, or to develop multistate or regional consortia to pool limited funding to accomplish these goals.

State health departments will be required to allocate most of the Phase 2 funds to hospitals such as tertiary referral centers, community hospitals, rural hospitals, Indian Tribal hospitals, and Medicare dependent hospitals, as well as community health centers, rural health centers and federally qualified health centers that serve as a vital point of entry into the health care system. Emergency medical systems and poison control centers may also be funded by the State in order to support the hospital system's ability to respond.

III. Who Can Apply

The distribution of funds will be to all 50 States, the District of Columbia, the Commonwealths of Puerto Rico and the Northern Mariana Islands, the territories of American Samoa, Guam and the U.S. Virgin Islands, and the nation's three largest municipalities (New York City, Chicago and Los Angeles County). Funding will be provided to State or territorial health departments, and to the municipal governments or health departments. Individual hospitals, EMS systems, health centers and poison control centers should work with the applicable health department for funding through this program.

IV. Funding

The administrative and funding instrument to be used for this program will be the cooperative agreement, in which substantial HRSA programmatic collaboration with awardees is anticipated during the performance of the project. Under the cooperative agreement, HRSA will support awardees' activities through a memorandum of agreement to be established after the award of Phase 1 funding.

Approximately \$125 million will be allocated to cooperative agreements. Minimum allotments will be available of \$500,000 to the District of Columbia, \$250,000 to States, Puerto Rico, and the three municipalities, and \$150,000 to the other four territories. Remaining funds will be distributed to States, the District of Columbia, Puerto Rico and the three cities using a formula based on population.

Given the responsibilities of Federal, State, and local governments to protect the public in the event of bioterrorism, funds from this grant must be used to supplement and not supplant the non-Federal funds that would otherwise be made available for this activity.

Awards will be made in two phases, as described above (Section II, Purpose). Phase 1 is funded at approximately \$25 million, and is intended to support the State's efforts regarding needs assessment and to develop a plan of action. Phase 2, funded at approximately \$100 million, will be awarded for implementation efforts, provided the implementation plan is approved by DHHS. These implementation funds are expected to result in subsequent contractual awards to hospitals by States, to upgrade the ability of hospitals and other collaborating health care entities to respond to bioterrorist events.

Implementation funds will be awarded for a twelve-month period initially, with an option to renew for an additional twelve months based on performance during the first year. Future Federal funding will be awarded based on accomplishment of objectives and the availability of appropriated funds in succeeding fiscal years.

V. Timeline

States, territories and cities must file an application with HRSA as soon as feasible after receipt of this announcement, with a target date of no later than **February 25, 2002.** In order to facilitate rapid review by HRSA, copies of the application may be faxed or e-mailed to HRSA.

For applications submitted by the target date, grant awards will be made as soon as feasible. The Notice of Grant Award will reflect the total amount available to the State, Territory or Municipality under the program. Only the amount identified for Phase 1

(Needs Assessment, Planning, and Initial Implementation), however, will be released at this point.

States, Territories and the three municipalities must file the Phase 2 implementation plan with HRSA as soon as March 15 and no later than **April 15, 2002.**

Phase 2 implementation plans will be reviewed by a DHHS review committee within 30 days of receipt. Prior to the award of Phase 2 funding, recommendations arising from this review must be addressed. If the plans fulfill the review criteria (Section VIII below), implementation funding will be released by **May 15, 2002**.

VI. Application Requirements

States, territories and selected municipalities must apply for this program in two phases. In the first phase, a brief application (as described below) is required in order to trigger the rapid release of planning funds to the appropriate health department. For Phase 2, the State, territory or municipality will be required to submit an implementation plan. Based on an approved plan, Phase 2 funds will be released to the State, territorial or municipal awardee.

Phase 1: Application for Preliminary Funding

Information on applying for Phase 1 was previously sent out in the letter of February 6, 2002, to State Health Officers from Dr. Duke, Acting Administrator of HRSA. The material below supplements that earlier summary guidance.

Applicants should use the Public Health Service Grant Application Form (PHS 5161-1), which can also be viewed on line at www.mchb.hrsa.gov/. From there, look under "Funding Opportunities," then "Forms." Among pertinent data elements:

- Item 10 on the cover sheet should reference Catalog of Federal Domestic
 Assistance (CFDA) Number 93.003. Under contact person, include name,
 telephone and FAX numbers and an e-mail address. Under estimated Federal
 funding, include the total projected award for both allocations.
- The program narrative should be limited to 5 pages for this first application and should address the elements listed below. This is in recognition that more detail will be expected in the Phase 2 Implementation Plan.

Staffing and Medical Direction: The application should include a discussion of proposed staffing under Phase 1, to include a bioterrorism hospital preparedness coordinator, a medical director, and appropriate administrative staff.

Hospital Preparedness Planning Committee: To ensure representation of appropriate entities best equipped to deal with bioterrorist threats, a Hospital

Preparedness Planning Committee must be established to assist the health department in its hospital preparedness efforts. The application must describe the anticipated composition of the advisory group, and a brief rationale for inclusion of each member.

This group must include the following entities:

- State, territorial or municipal health department
- State emergency medical services office
- State emergency management agency
- State hospital association
- State office of rural health
- State or regional primary care associations
- Veterans Administration and military hospitals (if any available in the jurisdiction)

Other entities may include key nonfederal, academic, Tribal and Indian Health Service hospitals expected to take a leadership role in a regional bioterrorism preparedness program, medical, nursing and other professional societies, local emergency medical systems, State or regional poison control centers, metropolitan medical response systems, disaster medical assistance teams (DMAT), police and fire departments, Red Cross and other voluntary organizations, consumer representatives, experts in medical, nursing, pharmacy and public health specialties such as emergency medicine, primary care, infectious disease, toxicology, occupational health and school health, and other Federal programs that are important in bioterrorism-related State programs (such as the CDC's Bioterrorism Preparedness and Response Program and Division of Global Migration and Quarantine).

Coordination and Collaboration: The Implementation Plan required for Phase 2 will be expected to integrate proposed uses of FY 2002 funds from HRSA, CDC and OEP. Although the intent of this combined Phase 2 application is the integration of multiple funding sources, the needs assessment, plan and budget must be presented in discrete parts addressing each agency's priorities.

For the Phase 1 application, provide a brief narrative on how the needs assessment and implementation plan funded under this program will be coordinated with plans being developed using funds from the Centers for Disease Control and the Office of Emergency Preparedness.

If the State anticipates developing regional plans within the State, or collaborating with other States either to meet the needs of a shared metropolitan area or to pool limited funds to develop a multistate plan, provide a brief narrative outlining this proposal.

Needs Assessment: Provide a brief narrative on the approach to developing and implementing a needs assessment for a comprehensive bioterrorism program as described in this guidance.

Implementation Plan: Provide a brief narrative on the approach to developing a plan that addresses the priorities identified in the needs assessment, or to assessing and updating an existing plan for a comprehensive bioterrorism program as discussed in this guidance.

Budget: Provide a budget which covers Phase 1 funding in detail. This should include an itemized budget for the administrative and infrastructure components, as well as any implementation components that will be initiated during this phase. Indirect costs will be limited to 10% of the Phase 1 and Phase 2 total for this cooperative agreement.

Up to half of the Phase 1 funding may be allocated to planning and health department infrastructure to administer this cooperative agreement. Cost items may include:

- Medical direction (up to 1 FTE)
- Bioterrorism coordinator (up to 1 FTE)
- Support staff
- Travel expenses
- Meeting expenses
- Administrative equipment and supplies
- Communications (phone, long distance, electronic mail, etc.)

At least half (50%) of the Phase 1 award must be allocated to hospitals and other health care entities to begin implementation of their plans.

Phase 2: Development of Needs Assessment and Implementation Plan

After receipt of Phase 1 funds, the State must begin to develop a needs assessment of hospitals and EMS systems (using tools deemed appropriate by the State planning committee), and an implementation plan based on those needs. For States that have already made significant progress in completing a needs assessment and plan, remaining Phase 1 funds may be used to address immediate needs. Funding under Phase 2 of the cooperative agreements will then be released to State, territorial and municipal health departments that submit approvable plans for upgrading hospital preparedness for bioterrorist disasters and other outbreaks of infectious disease.

In the brief period available to prepare the initial needs assessment and implementation plan, States, territories and cities should focus on information already available and plans already in place. A timeline with measurable objectives should then be included, which shows how remaining issues will be addressed.

Recognizing that funding will be limited, the implementation plan should be prioritized based on the needs and available funds. Priority must be given to specific biological terrorism threats, i.e. infectious agents and their toxins. The plan may address other hazards to the extent that bioterrorism response can be generalized to those hazards, but an all-hazards approach must not overshadow the planning for biological agents.

Development of multitiered systems of hospitals, outpatient centers and EMS systems, or of regional or multistate consortia where appropriate, is encouraged.

Successful implementation will depend heavily upon a well-articulated needs assessment and measurable, achievable and sustainable plans following from it. Recognizing the short time line for initial release of funds, States are encouraged to submit time lines for planning and implementation tasks over a 24-month period.

Content of the Implementation Plan

Phase 2 plans must also be submitted using the Public Health Service Grant Application Form (PHS 5161-1) which can be downloaded as outlined in the Phase 1 section above. The implementation plan must address the following items.

- **A.** Background and History (up to 5 pages): The plan must include background information that describes the State's previous experience with bioterrorist incidents, if any, the response to those incidents, and the lessons learned that impact on the current planning effort. It should also discuss current efforts aimed at emergency planning in the State, and describe the role of organizations currently involved. Specific items would include:
- Existing Federal, State and local resources in the State, including hospitals, outpatient facilities and EMS systems, with identified gaps in capacity
- Existing collaboration between hospitals, outpatient facilities and EMS on both terrorism and general disaster response initiatives
- Current collaboration with other local, State, and regional health agencies related to public health, rural health, public safety and emergency management. Please include an organizational chart that describes the relationship of the health department to other State agencies involved in bioterrorism response.
- Description of current antiterrorism and disaster planning initiatives within the State, that addresses hospital, outpatient and EMS participation, available resources, and amount and sources of funding already available
- Current status of hospital, outpatient and EMS systems with respect to patient flow, bed capacity, overcrowding, diversion, and surge capacity
- **B.** Needs Assessment (up to 5 pages): Prepare a plan for assessing the unmet needs the State has in order to be able to implement a hospital and EMS bioterrorism response. Where substantial needs assessment activities have been completed or are in progress, summarize the results to date and provide a time line for addressing further issues, including measurable milestones to facilitate accounability.

Ongoing identification of needs may be based on objective data collected from surveys or other evaluation tools, after-action reports from the State's response to past terrorism or natural disasters, or published literature. The needs assessment should result in a database that includes all hospitals, outpatient facilities, EMS systems and poison control centers. The assessment should include such issues as:

- Need for a bioterrorism plan that addresses triage, isolation, quarantine, decontamination, stabilization, treatment and referral of multiple casualties (whether presenting all at once or gradually over time)
- Needs for reconfiguration of hospital space for quarantine of communicable diseases and treatment of infectious disease epidemics, including provision of security services
- Need for personnel augmentation (physicians, nurses, pharmacists, mental health professionals and others) to handle large influxes of patients
- Need for licensing, credentialing and supervision of clinicians not normally working in facilities responding to a bioterrorist incident
- Need for mechanisms to manage unsolicited clinical help and donated items
- Need for protection of clinicians (vaccination, antibiotic prophylaxis, personal protective equipment, education) to ensure their availability in an epidemic
- Need for training in recognition of rare diseases with bioterrorism potential
- Need for diagnostic and treatment protocols addressing bioterrorist infectious diseases with early nonspecific syndromes, and for mechanisms to bring clinicians up to speed on these protocols before and during a bioterrorism event
- Need for pharmaceuticals and vaccines for patients or exposed individuals
- Needs of children, pregnant women, the elderly and those with disabilities
- Need for infrastructure and collaboration between hospitals and EMS systems that support effective diversion and referral plans
- Need for identification of emergency departments and outpatient centers capable of initial assessment and treatment of biological exposures
- Need for linkages to sources of expert consultation and referral centers capable
 of addressing biological exposures definitively (such as a communicable
 diseases isolation facility that can serve as the dedicated referral hospital for
 CDC's Division of Global Migration and Quarantine)

- Need for delivery to facilities and individual casualties of essential goods and services such as food, water, shelter and electricity
- Any existing gaps in objective data that inhibit planning
- Needs for technical assistance from the HRSA Bioterrorism Hospital Preparedness Program or its contractors

C: Critical Benchmarks: The implementation plan must address the three specific critical benchmarks included in the letter from Secretary Thompson to the Governors.

1. Program Direction: There must be leadership at the health department level to ensure coordination of all three funding streams. In addition, specific direction for the hospital preparedness plan will be needed.

The Coordinator is responsible for implementing the needs assessment and operational plans for bioterrorism preparedness in the State. He or she should have training and experience in disaster response planning, including knowledge of clinical issues, administrative procedures, linkages to appropriate agencies and organizations, and training issues appropriate to bioterrorism preparedness.

- Designate a Coordinator for Bioterrorism Hospital Preparedness Planning. Describe the duties of the coordinator (1-2 pages).
- Include a curriculum vita that describes the education, training and experience that qualify this person for the task.
- 2. Hospital Preparedness Planning Committee: This committee will have been established during Phase 1. It should meet at least once during the planning phase, and quarterly during the implementation phase, to provide guidance, direction and oversight to the State health department in planning for bioterrorism response.
 - Provide a description or charter defining the mission and duties of this planning committee (1-2 pages).
 - Provide a current roster of the planning committee, and the rationale for inclusion of each member.
 - The planning committee will be required to sign off on State or regional hospital preparedness plans submitted to HRSA.
- 3. Regional Hospital Plans (up to 5 pages): It is critical that State health departments plan for a potential epidemic involving at least 500 patients in each State or region. Recognizing that many of these patients may come from rural areas served by referral

centers in metropolitan areas, planning must include the surrounding counties likely to impact the resources of these cities.

- The application must include a timeline that describes the approach to development and implementation of a regional hospital plan for large-scale epidemics, to include the following issues.
- Describe the plan for increasing hospital bed capacity to accommodate increases in admissions from an infectious disease epidemic over an extended period of time
- Describe the plan for providing isolation and quarantine for casualties, using such references as CDC's for Type C (contagious) facilities.⁵
- Describe the plan to address overcrowding and the need for hospital diversion, with large numbers of acute casualties arriving on their own or by ambulance, including a rapid communication plan with EMS units that allows them to determine a destination immediately at any time.
- Describe how hospitals will receive patients on a daily basis when several hospitals are on diversion simultaneously.
- Describe the plan for ensuring movement of equipment maintained by hospitals or EMS systems to the scene of a bioterrorist event.
- Describe how the special needs of children, pregnant women, the elderly and those with disabilities will be addressed in ensuring access to medically appropriate care. Planning for children should include school settings and the clinicians caring for them there.
- Describe how essential goods and services such as food, water, electricity and shelter will be delivered to patients and hospitals.
- Describe how hospital security will be provided (crowd control, patient traffic to support triage decisions, prevention of further terrorist attacks at the hospital).
- Describe procedures for safe and appropriate disposal of medical waste.
- **D.** First Priority Planning Areas (up to 5 pages): Recognizing the comprehensive nature of an effective bioterrorism response plan, a number of first-priority issues have been identified for the Phase 2 implementation plan. Describe the intended approach to meeting these priority needs. Where substantial plans already exist, please summarize them. Given the limited time available

to prepare an initial plan, timelines with measurable milestones are acceptable for components not already in place.

- 1. Medications and Vaccines: There must be contingency plans for antibiotic and vaccine treatment of biological exposures. These must include a practical action plan for tapping into Federal resources (such as the CDC antibiotic stockpile or vaccine stockpiles that may be created in the near future).
 - Recognizing that a Federal response is secondary to a State's ability to respond to a disaster, plans should be articulated for stockpiling of antibiotics and vaccines at the State or local level for an immediate response. Consistent with concerns that have been expressed about potential overuse of medical treatments for biological exposures, stockpiling and treatment protocols must be consistent with generally accepted clinical recommendations, such as those promulgated by CDC and professional organizations.
 - Describe the State health department readiness plan for immediate receipt and distribution of antibiotics and smallpox and anthrax vaccines made available from Federal sources. This readiness plan must be operative on a 24 hour per day, 7 day per week, basis.
 - Describe the arrangements for tapping into other resources for antibiotic and vaccine treatment of biological exposures, such as pharmaceutical caches of metropolitan medical response systems funded by the Office of Emergency Preparedness, or other public and private sources.
 - Justify the composition of planned State and local antibiotic and vaccine stockpiles, on the basis of generally accepted clinical recommendations.
- 2. Personal Protection, Quarantine and Decontamination: It is important to plan for personal protective equipment to protect health care workers and patients during a biological threat, portable or fixed decontamination systems, or capital improvements designed to increase capacity for quarantine and treatment of biological casualties.
 - Describe how responding clinicians and their families will be protected from exposures to biochemical casualties and environments (such as provision of personal protective equipment, antibiotics and vaccines).
 - Describe how existing decontamination systems will be upgraded to allow for large numbers of patients exposed to particulate infectious material from an airborne or environmental release (such as fixed hospital units, portable units, or DMATs capable of mobile decontamination).

- Describe which hospitals in the State (such as the dedicated referral hospital for CDC's Division of Global Migration and Quarantine) will be targeted for capital improvements (such as air-filtered quarantine units or biological decontamination facilities) to assure safe and effective isolation and decontamination of large numbers of patients with communicable bioterrorist diseases.
- Describe how additional needed decontamination equipment will be deployed to maximize statewide benefit and cost-effectiveness. This may include plans for mobile caches of supplies that could be deployed to areas with an acute need.
- 3. Communications: The needs assessment should address existing local and State communications capabilities available to hospitals and collaborating entities, and the ability of the statewide communication system to respond to overloading of standard telephone, cellular phone and radio communications during a bioterrorist incident resulting in mass casualties.

Funding proposals for information technology must be consistent with the approach and technical specifications contained in the CDC guidance on the Public Health Preparedness Program, in the section on Public Health Information Technology. Also, proposals under the HRSA cooperative agreement to enhance hospital preparedness communication abilities must be clearly distinguished from similar proposals that respond to the CDC guidance addressing health department preparedness.

- Describe how the State bioterrorism hospital preparedness program will be activated during an acute incident, or one involving an epidemic developing over a longer time period.
- Describe the plan for addressing gaps in the communications systems among hospital emergency departments, outpatient facilities, EMS systems and State and local emergency management, public health and law enforcement agencies, as they relate to bioterrorism response.
- Describe how communication systems will be made redundant, to ensure communication backup in the event of failure or excess load on land line and cellular telephone systems and Internet communications.
- Describe the plan for electronic tracking of bed status across the State with a
 central device or system, and how this information will be updated continuously
 to maintain currency.
- Describe the plan for monitoring all emergency department and outpatient visits, complaints, and diagnosis from a surveillance and detection perspective, and how

- this will be integrated on the State and national level. Briefly describe how this will be funded with CDC surveillance money in constructing an integrated plan.
- Describe how the general public will be educated as to where and when to present to the hospital or to activate EMS.
- Describe the public relations plan for dealing with large numbers of patients, worried well, family and friends, and media.
- 4. Biological Disaster Drills: Community disaster drills focusing on biological threats have not been staged frequently. It is critical that didactic training and certification are followed up with practical exercises that both reinforce knowledge and uncover opportunities for improvement in the bioterrorism disaster plan.
 - Describe the plan for testing State and local bioterrorism response plans and for reinforcing training efforts.
 - Describe how biological disaster drills will be of sufficient intensity to impact the community's normal operations during the exercise, in a way similar to what would be expected during an actual biological terrorist incident.
 - Describe the process for incorporating lessons learned from the drills into periodic revisions of the bioterrorism response plan.
- **E.** Second Priority Planning Areas (up to 5 pages): These are additional important areas to be considered in a comprehensive bioterrorism response plan. They may be addressed in this application to the extent that funding and State priorities allow.
- 1. Personnel: Planning should include provisions for emergency increases in staffing with physicians, nurses, pharmacists, mental health professionals, emergency medical technicians and others, and for linkages with other hospitals and EMS systems.
 - Describe how additional hospital and EMS personnel will be recruited and deployed at the local level to implement an effective medical bioterrorism response plan. Plans should address the capability of immediately deploying 50 or more extra personnel in urban areas, and 20 or more in rural areas.
 - Describe the plan for ensuring support for hospitals and EMS systems through mutual aid agreements, metropolitan medical response systems or disaster medical assistance teams.
 - Describe the plan for license reciprocity, credentialing and supervision of clinicians not normally working in facilities responding to bioterrorism.

- Describe the plan for managing unsolicited offers of help from undocumented clinicians arriving in a biological disaster area.
- 2. Training: Training of hospital and prehospital clinicians at all levels will be encouraged. Recognizing that appropriate response plans will differ between health care entities licensed at different levels, training may focus on recognition of bioterrorism-related diseases, decontamination and quarantine procedures, initial assessment, stabilization and transport for basic-level EMS systems, treatment under standing orders for advanced or paramedic-level EMS systems, diagnosis, treatment and stabilization at hospitals and outpatient facilities, and definitive care at centers of excellence in infectious disease.
 - Describe the plan for training and educating hospital and EMS clinicians to respond to a bioterrorism event, including components for managing fears about personal exposure to biological agents.
 - Describe the existing State or national training resources that will be utilized in developing the State's bioterrorism training program.
 - Describe the plan for developing or updating diagnostic and treatment protocols for bioterrorist infectious diseases and toxins with early nonspecific syndromes, to be used in emergency departments, outpatient and inpatient facilities and intensive care units, and the prehospital environment. Priority should be given to the following:⁴
 - 1. Bacteria: anthrax, brucellosis, plague, Q fever and tularemia
 - 2. *Viruses*: smallpox, equine encephalitides, and hemorrhagic fevers
 - 3. <u>Toxins</u>: botulinum, staphylococcal enterotoxin B, ricin, and T-2 mycotoxin
 - Describe how special issues affecting children, pregnant women, the elderly and those with disabilities will be addressed in these protocols.
 - Describe how immediate information needs experienced by clinicians caring for patients or serving as EMS medical control officers will be addressed during a bioterrorist incident (such as web-based diagnostic and treatment protocols or telephone consultation).
 - Describe the plan for enhancing the ability of poison control centers serving the State to respond immediately to requests for information from clinicians and the general public following a bioterrorist incident.
 - Describe the plan for ensuring continuing professional education credentialing of in-services or conferences on bioterrorism.

• Describe the plan for a Statewide bioterrorism education and certification program for clinicians, or a plan for linking the State's efforts into similar available national programs, including those of the military.

3. Patient Transfer:

- Describe how hospitals will be evacuated in the event of a bioterrorist attack, and how the hospital patients will be housed to ensure safety and good medical care.
- Describe how patients could be triaged to make additional hospital bed space available during a terrorism event.
- Describe how hospitals and EMS will deal with patient transports and destinations associated with a communicable diseases.
- Describe the plan for using nonhospital facilities to shelter and treat mass casualties or epidemic victims if hospitals are overwhelmed.
- Describe how the needs of children, pregnant women, the elderly and those with disabilities will be addressed during patient transfers.
- Describe the role of schools in a bioterrorism incident; as potential targets, as facilities for emergency shelter or quarantine, and as resources for clinicians such as school nurses who may be assigned there.
- **F.** Infrastructure (up to 10 pages): These elements must be addressed in the Phase 2 plan, in order to ensure an adequate infrastructure to support the planning and implementation process.
- 1. Staffing and Medical Direction: If the Coordinator for Bioterrorism Hospital Planning is not a physician, the plan must address how the State will obtain medical expertise in developing its bioterrorism preparedness plan. This could include support of the State EMS medical director or contracting with qualified nongovernmental physicians for these services. Physicians with board certification in emergency medicine, and training and experience in disaster medicine, infectious disease and toxicology would be desirable for this position.

The plan may include positions for persons qualified in grant proposal writing, financial management and administrative support.

• Discuss the role of the medical director or designee in providing expert guidance to the State bioterrorism preparedness program, and the education, training and experience that prepares this person for the task.

- Discuss the role of the State EMS director in the bioterrorism hospital preparedness program administered by the State health department.
- Discuss the needs for support personnel to administer the cooperative agreement, and the training and experience possessed by these people.
- 2. Coordination and Collaboration: The plan must address the roles of local, Tribal, Federal and military hospitals, referral centers, EMS systems, and outpatient facilities, as well as how they collaborate through such mechanisms as mutual aid agreements and regional or multistate consortia.

The application should also demonstrate knowledge of bioterrorism preparedness resources on the local, regional, State and national level. Examples of resources include State and local emergency medical services, professional organizations, poison control centers, metropolitan medical response teams, disaster medical assistance teams, State and Federal emergency management agencies and other Federal programs such as CDC's Bioterrorism and Preparedness and Response Program and Division of Global Migration and Quarantine.

- Letters of support must be included outlining specific roles for any of these resources being used in this plan.
- A critical review element will be the State's ability to coordinate funding streams for bioterrorism related programs, specifically those coming from HRSA, CDC and the DHHS Office of Emergency Preparedness (OEP), into a single well-integrated vision and operational plan.
- Discuss coordination with other State or Federal funding sources being used in this plan.
- Address how the bioterrorism preparedness plan interfaces with local, regional and State preparedness plans for other types of disasters.
- 3. System Development: Costs attributable to planning, coordination and infrastructure for the State health department, outside organizations, and local hospitals, outpatient facilities and EMS systems should be justified. Examples of these costs include those for development of plans, operational protocols, policies and procedures, travel necessary to meet with collaborating entities, or expenses to attend professional conferences for either training or networking.
 - Discuss the sustainability of the preparedness plan (other funding sources, in-kind resources, integration into existing programs).

- Describe the financial planning process to maintain a State of preparedness if the Federal funding in this grant is no longer available in subsequent years.
- 4. Legislation and Regulation:
 - Address any State statutes, regulations and ordinances which may impact a timely and complete response to terrorism (i.e. EMS authority to administer medications or immunizations, credentialing, licensure, professional liability or delegation of authority for executing emergency public health measures).
 - Discuss solutions to these barriers that will be pursued by the State EMS agency and other components of State government.
- *G. Letters of Support:* These should document the collaboration described in the application. Appropriate collaborating agencies would include, but are not limited to:
- State hospital association
- State EMS regulatory agency or advisory board
- State rural health office
- State office of emergency management
- Tertiary care centers serving as referral facilities or centers of excellence for bioterrorism incidents. Letters must be obtained from all such centers that are integrated into the State's bioterrorism plan.
- Other organizations being used as resources in bioterrorism preparedness
- *H. Budget:* Provide an updated budget and justification for Phase 2, which includes direct and indirect costs being requested.
- Indirect costs are budgeted at the state's prenegotiated rate, and are capped at 10% of the total award for both Phase 1 and Phase 2.
- Indirect costs are those that are incurred for common or joint objectives, and therefore cannot be identified readily and specifically with a particular sponsored program, but are nevertheless necessary to the operations of the organization. For example, the costs of operating and maintaining facilities, depreciation, and administrative salaries are generally treated as indirect costs.
- Funds expended for State health department needs may not exceed 20% of direct costs for Phase 2.
- Provide an itemized budget and justification for the proposed distribution of funds to hospitals and other health care entities for implementation efforts as described in this plan. At least 80% of the funds awarded for Phase 2 direct costs must be allocated to hospitals through written contractual agreements. To the extent justified, a portion of

these funds may be made available to collaborating entities (such as health centers, EMS systems and poison control centers) that contribute to hospital preparedness.

I. Data Collection, Quality Improvement and Reporting: The plan must provide for progress reports on measurable objectives. A local data collection system that can be integrated into a standardized State-level report will be encouraged.

The quality improvement plan should be designed so as to update the initial needs assessment and revise the plan for more effective future operations. The quality of this evaluation plan will impact on future grant funding, if it becomes available.

Semiannual reports are required, and will be a critical part of continuation applications for subsequent fiscal years. Details on reporting requirements will be made available at the time funds are released for Phase 2.

VII. Review Criteria

Applications will be reviewed based on the following criteria:

- Extent to which plan relates to identified needs:
 - 2. Planning focuses on first priority areas as highlighted in the needs assessment and grant guidance.
 - 3. Personnel are hired in response to objective needs.
 - 4. Personnel are objectively qualified to carry out program.
 - 5. Medical and communications equipment and capital requests relate to sustainable program goals building upon identified needs.
- Extent to which objective are measurable, achievable, and sustainable
- Completeness and clarity of the project narrative:
 - 6. Addresses and prioritizes all components within the guidance
 - 7. Provides a logical time line with associated tasks
 - 8. Provides a realistic approach which is accomplishable within the time frame and funding provided
- Extent to which medical preparedness plan is coordinated with other sources of funding to construct a comprehensive bioterrorism response plan
 - 9. Linkages that contribute objective support to program.
 - 10. Coordination with other sources of funding, especially from CDC and OEP
 - 11. Coordination with metropolitan medical response teams or disaster medical assistance teams
 - 12. Needs of all age groups (prenatal, neonatal, infant, child, adolescent, adult and geriatric) are addressed in the plan

- Extent to which quality improvement plan feeds back to ongoing needs assessment and planning revisions
- Clarity of budget and coordinated budget narrative
- Extent to which administrative costs and travel can be related objectively to bioterrorism response infrastructure needs

VIII. Application Submission

HRSA will accept Phase 1 applications as soon after receipt of this guidance as possible, but with a target date of no later than **February 25, 2002.** Phase 1 awards will be made shortly after applications are received.

HHS is prepared to receive Phase 2 needs assessments and implementation plans as early as March 15, but no later than **April 15, 2002.** Based on an acceptable plan, Phase 2 funds will be released no later than May 15 or within 30 days following the date of review, whichever is earlier.

Applications for both phases must be addressed to:

U.S. Department of Health and Human Services
Health Resources and Services Administration
Maternal and Child Health Bureau
ATTN: Jacquelyn Whitaker, Grants Management Specialist
Parklawn Building, Room 18-12
5600 Fishers Lane
Rockville, MD 20857
(301) 443-6960 (Phone): for grants management issues

To facilitate early review, Phase 1 applications may be faxed to 301-443-6686, ATTN: Ms. Jacquelyn Whitaker, or e-mailed to the program director at the address below. For any application that is faxed or e-mailed, a hard copy original signed application and two copies must also be provided. Although it is not required, it would be appreciated if a third copy could be provided, to expedite the review process.

Also, please be aware that your jurisdiction will receive a companion communication from the Centers for Disease Control and Prevention (CDC) regarding funds available to your State for enhancing public health preparedness for response to bioterrorism. As indicated in a recent letter from the Secretary of Health and Human Services to your Governor, he or she is to review the CDC- and HRSA-related work plans concurrently with a view to ensuring appropriate integration of these activities and, where applicable, with activities conducted by the HHS-funded Metropolitan Medical Response Systems.

Therefore, in addition to submitting the official work plans directly to CDC and HRSA as called for in our respective guidances, please provide your Governor with copies of the completed CDC-and HRSA-related work plans as soon as possible so that he or she can review them and, upon judging them acceptable, transmit one copy of each directly to the Secretary along with a letter of endorsement. The HHS review of the work plans will not commence until the Secretary is in receipt of the Governor's endorsement letter and enclosures. Please send these materials via an express mail service directly to the Secretary's office (U.S. Department of Health and Human Services, 200 Independence Avenue SW, Washington, D.C. 20201) to ensure the most rapid transmission.

IX. Program Director

Richard Niska, MD, MPH, FACEP
Director, HRSA Bioterrorism Hospital Preparedness Program
Parklawn Building, Room 18A-38
5600 Fishers Lane
Rockville, MD 20857
301-443-4996 (Phone): for program development issues
301-443-1296 (Fax)
Rniska@hrsa.gov (e-mail)

X. References

- 1. N Treat, JM Williams, PM Furbee, et al. *Hospital preparedness for weapons of mass destruction incidents: an initial assessment.* Annals of Emergency Medicine 2001; 38(5).
- 2. J Warrick, S Fainaru. *Bioterrorism preparations lacking at lowest levels*. Washington Post, 22 October 2001, page A7.
- 3. L Garrett. *Biowar: threatening biological terrorism and public health.* Betrayal of trust: the collapse of global public health, Hyperion, 2000, chapter 5, page 499.
- 4. United States Army Medical Research Institute of Infectious Diseases (USAMRIID). *Medical Management of Biowarfare Casualties.* February 2000.
- 5. *CDC Interim Smallpox Response Plan and Guidelines*, Draft 2.0, 21 November 2001. http://www.bt.cdc.gov/agent/smallpox/smallpox/smallpox.asp